

CLAIMS

What is claimed is:

1. A seat post for a bicycle comprising:
a member defined by a tubular region integral with a head region; and
wherein a length of said tubular region includes at least one region with a circular outer circumference, and a clamp region having a circumference defined by a circular surface and a stress relief surface.
2. The seat post of claim 1, wherein said member is a shell constructed from a carbon composite material.
3. The seat post of claim 1, wherein said at least one region includes a first region and a second region separated by said clamp region.
4. The seat post of claim 3, wherein said head region transitions to said tubular region at said second region.
5. The seat post of claim 1, wherein said stress relief surface is flat.
6. The seat post of claim 1, wherein said stress relief surface has an arcuate shape defined by a first radius that is larger than a second radius defining said circular surface.
7. The seat post of claim 1, wherein said stress relief surface extends linearly along the length of said clamp region.
8. The seat post of claim 1, wherein said head region includes a hollow inner region, and wherein a first center longitudinal axis of said head region intersects with a second center longitudinal axis of said tubular region.
9. The seat post of claim 8, wherein said hollow inner region is defined by a first tapered portion and a second tapered portion separated by a middle portion, and wherein said first tapered portion and said second tapered portion extend outwardly along said first longitudinal axis while expanding radially from said first longitudinal axis.
10. The seat post of claim 1, wherein said at least one region curves forwardly from a longitudinal axis of said tubular region before transitioning to said head region.

11. A seat post for a bicycle comprising:
 - a member defined by a single shell including a tubular region integral with a hollow head region;
 - wherein said tubular region includes a first region, a second region, and a third region, wherein the second region separates said first region and said third region;
 - wherein said head region transitions to said tubular region at said first region;
 - wherein said first region and said third region each have a circular outer circumference symmetrical about a first longitudinal axis of said tubular region;
 - wherein said second region has a circumference defined by a circular surface and a stress relief surface; and
 - wherein a second longitudinal axis of said head region intersects with said first longitudinal axis.
12. The seat post of claim 11, wherein said stress relief surface extends linearly along the entire length of said second region.
13. The seat post of claim 11, wherein said stress relief surface is flat.
14. The seat post of claim 11, wherein said stress relief surface has an arcuate shape.
15. The seat post of claim 11, wherein said member is constructed from a carbon composite material.
16. The seat post of claim 11, wherein said head region includes a hollow inner region defined by a first tapered portion and a second tapered portion separated by a middle portion, and wherein said first tapered portion and said second tapered portion extend outwardly along said second longitudinal axis while expanding radially from said second longitudinal axis.
17. A seat post for a bicycle comprising:
 - a member defined by a single shell including a tubular region integral with a hollow head region;
 - wherein a length of said tubular region includes at least one region with a circular outer circumference symmetrical about a first longitudinal axis, and a clamp region

having a circumference defined by a circular surface and a stress relief surface; and
wherein said head region is symmetrical about a second longitudinal axis, and
said second longitudinal axis intersects with said first longitudinal axis.

18. The seat post of claim 17, wherein said head region includes a hollow inner region defined by a first tapered portion and a second tapered portion separated by a middle portion, and wherein said first tapered portion and said second tapered portion extend outwardly along said second longitudinal axis while expanding radially from said second longitudinal axis.

19. The seat post of claim 17, wherein said stress relief surface is flat.

20. The seat post of claim 17, wherein said stress relief surface has an arcuate shape defined by a first radius that is larger than a second radius defining said circular surface.

21. The seat post of claim 17, wherein said member is constructed from a carbon composite material.